



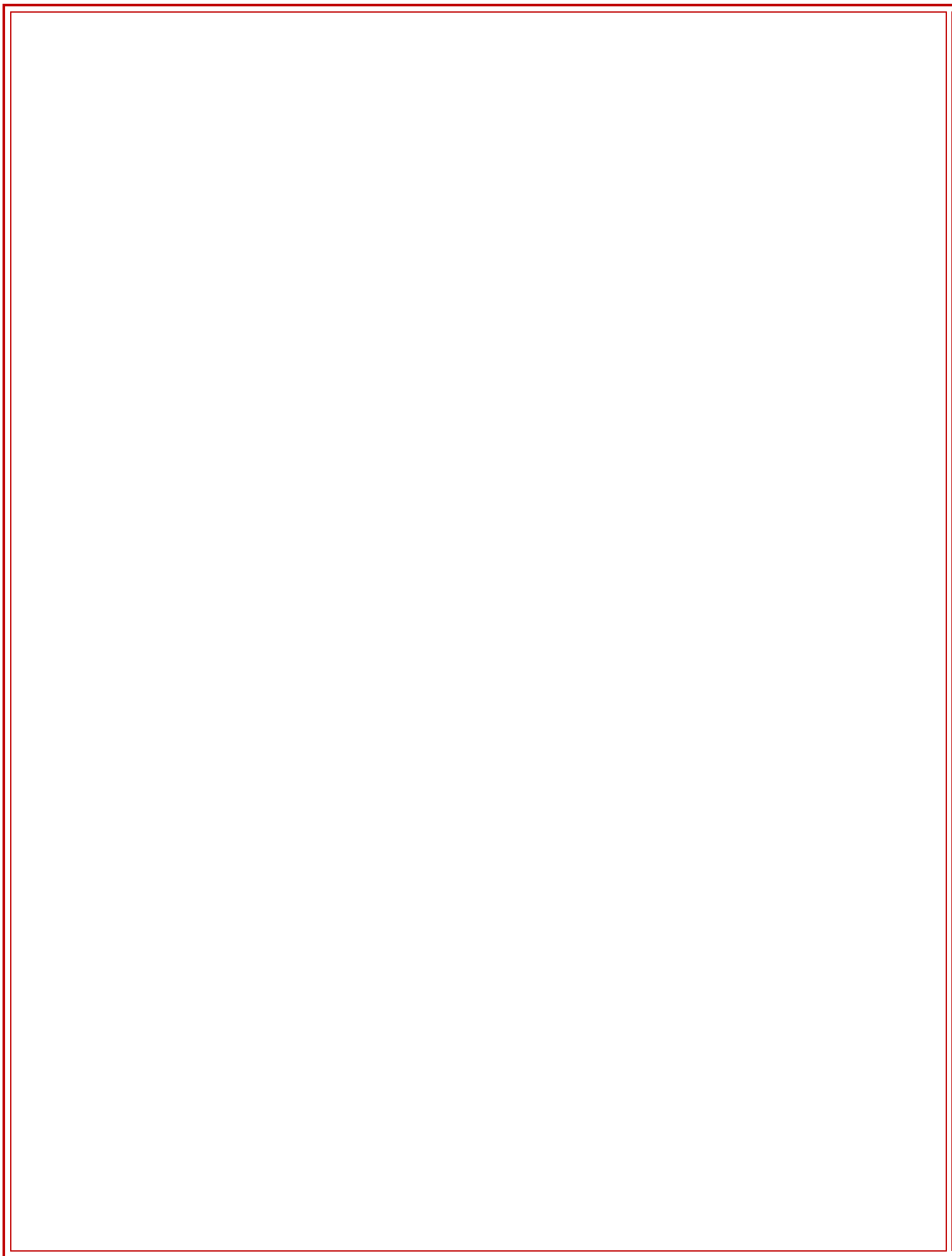
Office of the  
Delaware State Fire Marshal

# 68TH ANNUAL REPORT

*Fiscal Year 2021*

## ***OUR MISSION:***

*To provide the citizens of this State and all who visit a fire safe environment be it in the home, the workplace, or wherever they pursue their varied lifestyles or interests.*





STATE OF DELAWARE  
OFFICE OF THE STATE FIRE MARSHAL

GROVER P. INGLE  
STATE FIRE MARSHAL

DOVER OFFICE  
HEADQUARTERS

*September 1, 2021*

*The Honorable John C. Carney, Governor  
State of Delaware  
Office of the Governor  
Tatnall Building  
Dover, DE 19901*

*Dear Governor Carney,*

*I am pleased to forward to you the Sixty-Eight Annual Report for the Office of the State Fire Marshal.*

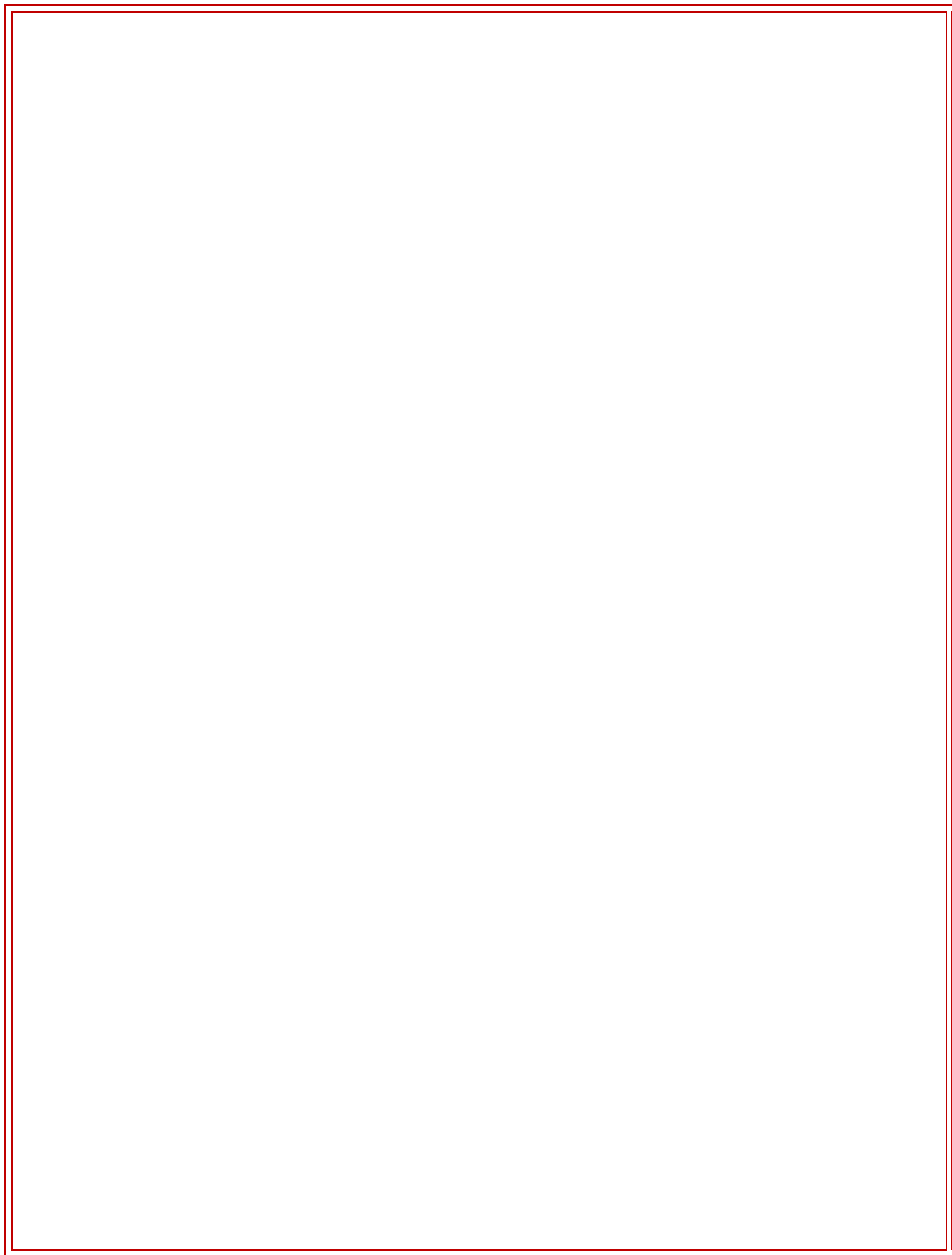
*The Sixty-Eight Annual Report reflects the accomplishments of the agency by our dedicated staff in providing a fire safe environment for the residents and visitors of Delaware during FY 2021. The COVID-19 pandemic presented challenges to all of us and by adapting our operations to meet these challenges we were able to successfully complete our mission by delivering timely and quality service to the public by conducting thorough and efficient fire investigations, performing occupancy inspections, various code enforcement activities, plan reviews, fire protection system reviews and inspections.*

*The staff of the Office of the State Fire Marshal continues to work with other state agencies, when called upon for assistance, work with our partners in law enforcement, our first responders, the Delaware Volunteer Firefighter's Association, Delaware State Fire School and Delaware State Fire Prevention Commission to deliver timely and quality service to the residents and visitors of Delaware.*

*We appreciate the support you provide to our agency as Governor as well as the support of the General Assembly in providing the funding and the resources needed to accomplish our mission during these challenging times.*

*Respectfully submitted,*

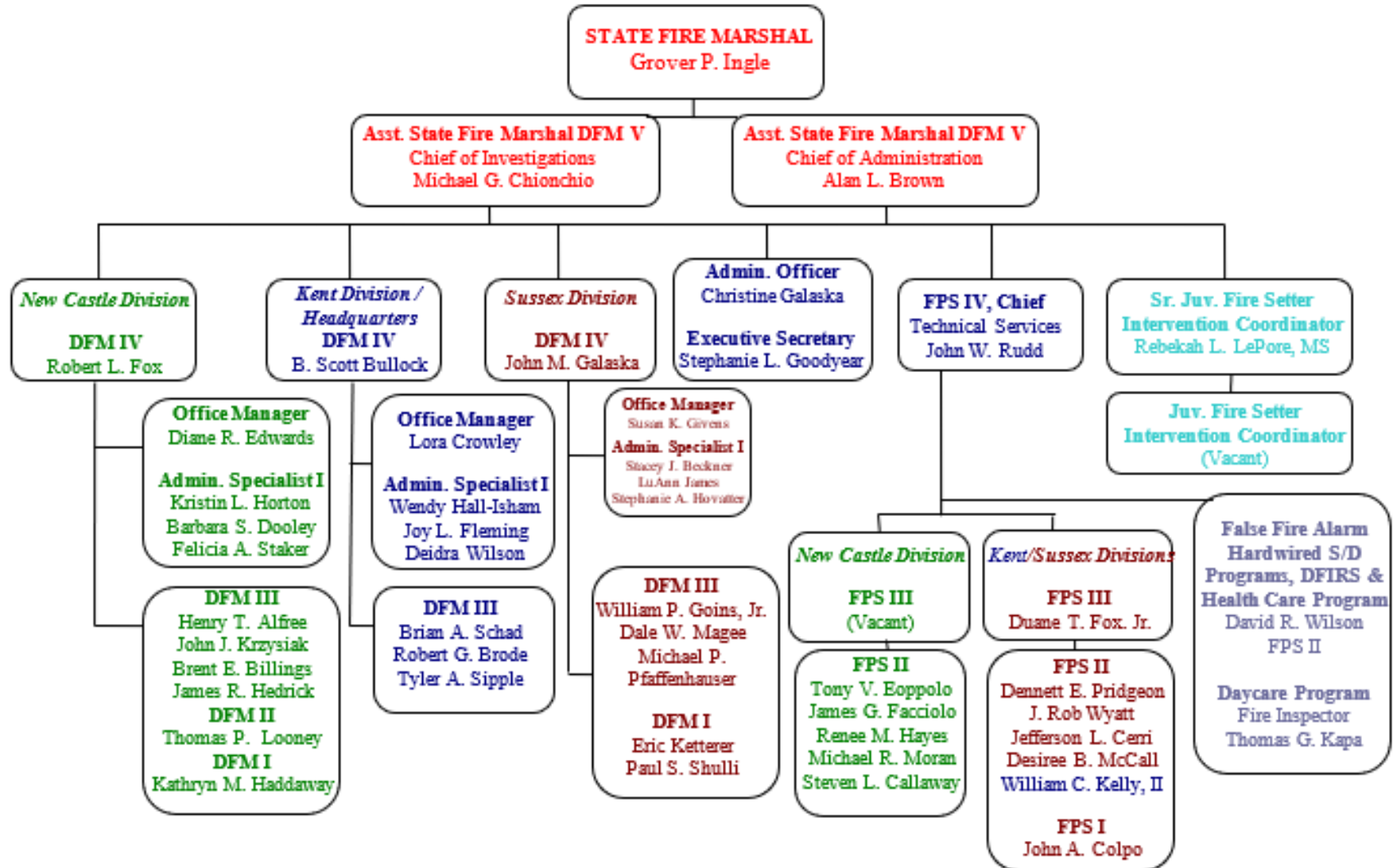
*Grover P. Ingle, CFPS, CFI-II  
State Fire Marshal*



# CONTENTS

Table of Contents.....	<b>3</b>
Table of Organization.....	<b>4</b>
History .....	<b>5</b>
Promotions, New Employees, & Retirees.....	<b>7</b>
Financial Report.....	<b>9</b>
Technical Services – <i>Activity During Covid</i> .....	<b>10</b>
Technical Services – <i>Plan Review Program</i> .....	<b>11</b>
Technical Services – <i>Inspections</i> .....	<b>13</b>
Delaware State Fire Prevention Regulations.....	<b>18</b>
Quality Assurance & License Program.....	<b>19</b>
Residential Fire Sprinkler Systems.....	<b>21</b>
Accelerant Detection Canine Unit.....	<b>22</b>
Investigations.....	<b>23</b>
FY21 Fire Deaths.....	<b>24</b>
Delaware Fire Incident Reporting System.....	<b>25</b>

# OFFICE OF THE STATE FIRE MARSHAL ORGANIZATIONAL CHART



Updated 062221

# ***OFFICE OF THE STATE FIRE MARSHAL***

In 1953, at the urging of the Volunteer Fire Service, the State Legislature created the Office of the State Fire Marshal and directed that regulations, reflecting nationally recognized standards, be promulgated to enhance life safety and property conservation for the citizens of Delaware.

The Office of the State Fire Marshal functions as an independent state agency under the State Fire Prevention Commission, which promulgates the State Fire Prevention Regulations, as enforced by the Office of the State Fire Marshal. As the law enforcement agency charged by 16 Del. C. §6612 with the suppression and investigation of arson, the Office of the State Fire Marshal provides the lead role in fire and arson investigations, statewide. The agency is charged with assisting the Chief of any fire department on request, inspections and code enforcement in health care facilities, educational occupancies, places of assembly, public accommodations, flammable and combustible liquids, flammable gases, explosives, and fireworks.

The Office of the State Fire Marshal is funded by revenues from the General Fund Appropriations of the State and by revenues generated by the agency from plan reviews of new construction and licensing fees associated with fire protection systems.

The Office of the State Fire Marshal is responsible for the comprehensive compliance with the State Statute for the installation of smoke detection devices in all residential occupancies, which greatly reduce the likelihood of injuries and deaths from fire.

The State Fire Marshal is appointed by the State Fire Prevention Commission and serves a four-year term. Under the direction of the State Fire Marshal, the daily operations of the agency are carried out by a team of dedicated staff members operating out of the headquarters division in Dover, with regional offices in New Castle and Georgetown.

The Office of the State Fire Marshal is to provide a fire safe environment for the citizens of Delaware and all who visit and carries out its mandate for Public Service, through the work of three divisions: Administration, Field Operations & Technical Services.

## ***ADMINISTRATION DIVISION***

The Administration of the Office of the State Fire Marshal is carried out at the headquarters division located in Dover and has the responsibility to ensure the accountability, accuracy, and competency of all facets of the agency through the following:

- Program Planning & Evaluation
- Administrative Policies & Procedures
- Maintain Central Records
- Fiscal Management & Budget Preparation
- Personnel Management
- Physical Plant Requirements
- Delaware Fire Incident Reporting System
- Staff Training & Education
- On-going Review of State Fire Prevention Regulations
- Data Management
- Fire Loss/Fire Death Statistics
- Interaction with a variety of State Agencies, General Assembly, Federal, County & Local Government

# ***FIELD OPERATIONS DIVISION***

## **Fire Investigations by Deputy Fire Marshals:**

- Conduct fire investigations to determine the origin and cause of the fire
- Identify incendiary fires & other fires of criminal nature
- Investigate arson & other fires of criminal nature
- Pursue & apprehend those responsible for other fires of criminal nature & arson
- Investigate fatal fire incidents
- Assist the Department of Justice by providing expert testimony on arson fires and other fires of criminal or accidental nature
- Identify accidental fire causes to establish proactive preventative measures

## **Public Service, Life Safety, and Code Enforcement by Deputy Fire Marshals:**

- Ensure compliance with the State Statute mandating the installation of smoke detectors in all residential occupancies
- Investigate complaints relative to violations of the State Fire Prevention Regulations
- Conduct on-site Life Safety, Fire Prevention and Code Enforcement Inspections in the following occupancies:

*\*Educational Occupancies\* Places of Assembly\* Public Accommodations\* Mercantile\* Business\* Flammable & Combustible Liquids \* Flammable Gases \* Fireworks \* Explosives \* Government Buildings \**

# ***TECHNICAL SERVICES DIVISION***

## **Fire Protection Specialists:**

- Review all plans & specifications for construction of new buildings, additions, alterations, or modifications to existing buildings to ensure compliance with the State Fire Prevention Regulations
- Provide consultation to prospective developers & builders regarding their plans for projects in the concept phase
- Ensure required fire alarm and fire suppression systems are installed properly
- Coordinate all requests for alternative code requirements and all appeals to the State Fire Prevention Regulations
- Oversee the Licensing & Certification of Fire Alarm Signaling & Fire Suppression System contractors
- Investigate complaints relative to deficiencies in the installation of fire protection systems
- Provide technical support to other state & local jurisdictions

## ***SPECIAL PROGRAMS***

*Juvenile Intervention \* K9 Accelerant Detection \* Health Care Facility & Day Care Facility Certification \* Major Incident Response Team \* Assistance to Fire Chiefs \* Delaware Fire Incident Reporting System \* Quality Assurance \* Hard Wired Smoke Detector \* False Fire Alarm \* Reduced Ignition Propensity Cigarette \**



## **PROMOTIONS**

**Christine R. Galaska**

*Administrative Officer*

Christine R. Galaska began her employment with our office on July 9, 2018, as an Administrative Specialist I. On January 4, 2021, Christine was promoted to Administrative Officer, assigned to the Kent County Division.

**Lora R. Crowley**

*Office Manager*

Lora R. Crowley began her employment with our office on May 28, 2019, as an Administrative Specialist I, assigned to the Kent County Division. On March 8, 2021, Lora was promoted to Office Manager, assigned to the Kent County Division.

**Tyler A. Sipple**

*Deputy Fire Marshal III*

Tyler A. Sipple began his employment with our office on February 20, 2017, as a Deputy State Fire Marshal I. On May 13, 2021, Tyler was promoted to Deputy Fire Marshal III, assigned to the Investigative Division in Kent County.

**John W. Rudd**

*Chief of Technical Services*

John W. Rudd began his employment with our office on October 1, 1996 as a Fire Protection Specialist I. On June 7, 2021, John was promoted to Chief of Technical Services.

## **NEW HIRES**

**John A. Colpo**

*Fire Protection Specialist I*

John A. Colpo began his employment with our office on March 15, 2021, as a Fire Protection Specialist I, assigned to the Sussex County Division.

**Joy L. Fleming**

*Administrative Specialist I*

Joy L. Fleming began her employment with our office on April 12, 2021, as an Administrative Specialist I, assigned to the Kent County Division.

**Deidra L. Wilson**

*Administrative Specialist I*

Deidra Wilson began her employment with our office on April 12, 2021, as an Administrative Specialist I, assigned to the Kent County Division.

**Paul S. Shulli**

*Deputy Fire Marshal I*

Paul S. Shulli began his employment with our office on June 21, 2021, as a Deputy State Fire Marshal I, assigned to the Investigative Division in Sussex County.

**RETIREES**

**Joseph Moran**

*Fire Protection Specialist II*

Joseph Moran began his employment with our office on April 18, 2016, as a Fire Protection Specialist I, assigned to the Sussex County Division. He retired on September 1, 2020.

**Scott A. Walker**

*Deputy Fire Marshal III*

Scott A. Walker began his employment with our office on June 1, 2004, as a Deputy State Fire Marshal I, assigned to the Investigative Division in New Castle County. He retired on December 1, 2020.

**R.T. Leicht**

*Chief of Technical Services*

R.T. Leicht began his employment with our office on April 14, 1998 as a Fire Protection Specialist I. He retired on April 24, 2021.

# FY-21 FINANCIAL REPORT

## GENERAL FUNDS

*(July 1, 2020 thru June 30, 2021)*

<u>GF Appropriations</u>	<u>Available Funds</u>	<u>Encumbrances</u>	<u>Current Year Expenditures</u>
Personnel (Salaries)	\$2,208,660.02	\$0.00	\$2,229,306.54
Contractual	\$263,145.60	\$0.00	\$263,200.00
Energy	\$37,787.46	\$3,440.00	\$33,493.83
Supplies	\$23,315.99	\$1,996.77	19,633.29
General Fund Totals	\$2,532,909.07	\$5,436.77	\$2,545,633.66

### Appropriated Special Funds (Revenue Holding Accounts)

<u>Appropriations</u>	<u>Revenue Received FY21</u>
Amusement-8601 (70002)	\$350.00
Assembly Licensing-8607 (70003)	\$7,275.00
Inspections-8605 (70004)	\$264,795.00
Day Care-8614 (70007)	\$34,753.54
Explosives-8602 (70010)	\$25.00
Fireworks-8603 (70014)	\$2,350.00
In-House License-8616 (70015)	\$300.00
Licensing-8610 (70017)	\$14,100.00
Occup/Permits/License-8606 (70019)	\$1,825.00
Systems License-8609 (70026)	\$20,575.00
Misc. Revenue (70028)	\$36,879.26
Plan Review-8604 (70108)	\$3,708,294.18
<b>ASF Sub Total</b>	<b>\$4,091,521.98</b>
<b>FY 20 Holding Accounts Carry Over</b>	<b>\$10,099,659.41</b>
<b>ASF Grand Total</b>	<b>\$14,191,181.39</b>

<u>ASF Appropriations</u>	<u>Available Funds</u>	<u>Encumbrances</u>	<u>Current Year Expenditures</u>
Personnel (Salaries)	\$1,810,028.24	\$0.00	\$1,794,246.40
Travel	\$2,379.30	\$0.00	\$964.95
Contractual	\$107,923.21	\$26,602.04	\$120,465.78
Supplies	\$16,122.31	\$0.00	\$3,102.06
Capital	\$23,392.76	\$5,772.10	\$40,729.33
Revenue Refund	\$150.00	\$0.00	\$0.00
<b>ASF Spending Totals</b>	<b>\$1,959,995.82</b>	<b>\$32,374.14</b>	<b>\$1,959,508.52</b>
<b>ASF Spending Grand Total</b>			<b>\$1,991,882.66</b>
<b>FY21 Holding Account Carry Over</b>			<b>\$12,199,298.73</b>

### Restricted Non-Appropriated Special Funds

<u>Appropriation</u>	<u>Available Funds</u>	<u>Revenue Rec'd</u>	<u>Expenditures</u>	<u>Remaining Funds</u>
Cigarette Certification (21002)	\$294,005.30	\$136,000.00	\$0.00	\$430,005.30
Detector Fund (20345)	\$3,367.50	\$46.07	\$0.00	\$3,413.57
Hearing Impaired Detectors (20511)	\$0.00	\$0.00	\$0.00	\$0.00
Juvenile Intervention Program (20566)	\$0.00	\$0.00	\$0.00	\$0.00
<b>NSF Totals</b>	<b>\$297,372.80</b>	<b>\$136,046.07</b>	<b>\$0.00</b>	<b>\$433,418.87</b>

**Total Cash on Hand June 30, 2021**

**\$12,632,717.60**

## **TECHNICAL SERVICES DIVISION**

### ***ACTIVITY DURING THE COVID CRISIS***

The years 2020 and 2021 have been unique for Fire and Life Safety Officials around the country. The following is a brief narrative on how the Office of the State Fire Marshal's Technical Services Division staff have functioned during the COVID pandemic.

In accordance with Governor John C. Carney's State of Emergency directive, on March 12, 2020 all public access to our three divisional offices was restricted and Technical Services staff had to pivot from the usual way of performing their job duties and conducting business. The construction industry was permitted to continue to work throughout the pandemic, and this meant that phone calls, meetings, plan reviews, and inspections would still need to be handled by our staff.

With the assistance of our partners at the State's Department of Technology and Information, all staff were provided with take-home computers so that remote working could begin.

Throughout 2020 and up to June 1, 2021, this remote work included phone calls, virtual meetings, plan reviews, and inspections, both virtually for smaller jobs and on-site with proper COVID and construction site personal protective equipment for larger jobs. All projects were reviewed and inspected on-time, and there was minimal disruption to the construction industry and owners regarding plan review turnaround time and inspections for occupancy of buildings.

Knowing the impact that the COVID closures had on the hospitality industry, once restaurants were permitted to re-open Technical Services staff assisted owners that wished to add outdoor decks and additional dining areas to their facilities by expediting reviews and approvals.

One unique situation faced was that sites and facilities traditionally used to house homeless people in New Castle County during cold weather/Code Purple events were not operating due to the COVID virus. Technical Services staff worked with New Castle County government and Friendship House staff in late 2020 to convert an existing high-rise hotel into a homeless shelter, which was named the New Castle County Hope Center, and which has become a hub for volunteers from all walks of life to provide services to those that are without a home.

Health Care and Daycare occupancies that were not inspected due to the threat of COVID spread last year and earlier this year are now being inspected regularly again. During the past year, several temporary triage facilities for potential overflow of patients were reviewed and inspected for several health care facilities.

The past year has presented many challenges to the Office of the State Fire Marshal, and the Technical Services Division staff have met and will continue to meet those challenges with the timeliness and professionalism expected by the many clients we serve throughout the State of Delaware.

# TECHNICAL SERVICES

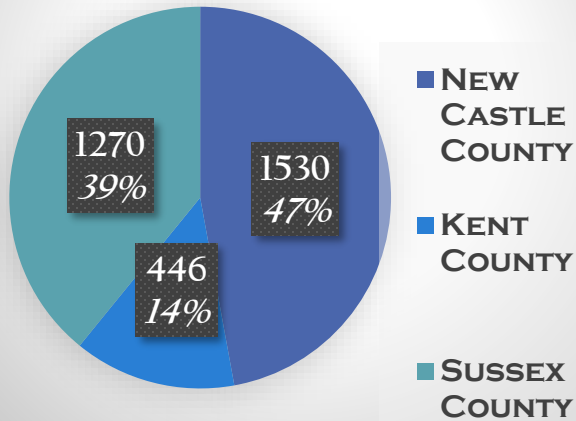
## Plan Review



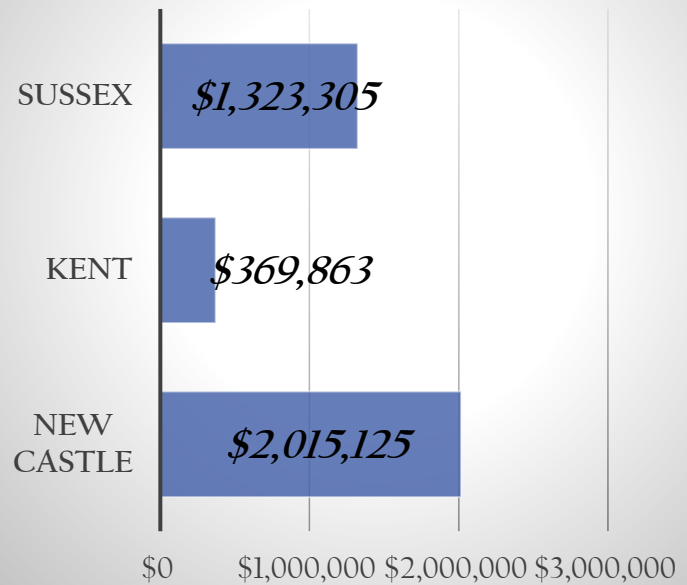
Technical Services Division staff reviews plans for compliance with the Delaware State Fire Prevention Regulations for various project types statewide.

- **Site Plans**: Technical Services staff review site plans to ensure access for fire, emergency medical, and law enforcement personnel; they review any required fire lanes, fire hydrant locations, fire department connection locations, and in cases where no water for fire protection is available, building setbacks from property lines. Some of the site plan types reviewed include:
  - Residential subdivisions, including one- and two- family dwellings, duplexes, and townhomes.
  - Multi-Residential sites, including apartment buildings, hotels, dormitories, lodging and rooming houses, and residential board and care facilities.
  - Educational sites, including public and private schools and any athletic facilities.
  - Health Care occupancies, including hospitals, nursing homes, and ambulatory health care facilities.
  - Detention and Correctional sites.
  - Commercial sites for business and retail use.
  - Assembly sites, including Places of Worship, restaurants, and banquet facilities.
  - Storage and Industrial sites, including mini-storage, warehouse, and distribution facilities, manufacturing facilities, poultry processing plants, and research and development laboratories.
  - Bulk storage tank locations for flammable/combustible liquids and other hazardous materials.
  - Sites proposing photovoltaic (solar) ground arrays and other “green” energy types of equipment.
- **Construction**: Technical Services staff review construction plans for all new buildings, additions, renovations, and tenant fit-outs, including small businesses and “Mom and Pop” type stores to multi-story state of the art research facilities. Also included are unique reviews for infrastructure improvements, including water main renewal and extension projects, cellular towers, and 800Mhz radio towers.
- **Fire Protection Systems**: Technical Services staff review plan submissions for fire sprinkler systems, fire alarm systems, hood and hood fire suppression systems, standpipe systems, clean agent systems, fixed fire suppression systems, and fire pump installations.
- **Tank Reviews**: Technical Services staff review plans for all above ground, underground, and mounded tanks for the storage of flammable and combustible liquids and any dispensing systems for these tanks. Propane tank installations, including retail propane tank exchange locations, are reviewed. Tanks storing bulk hazardous materials such as hydrogen are also reviewed.

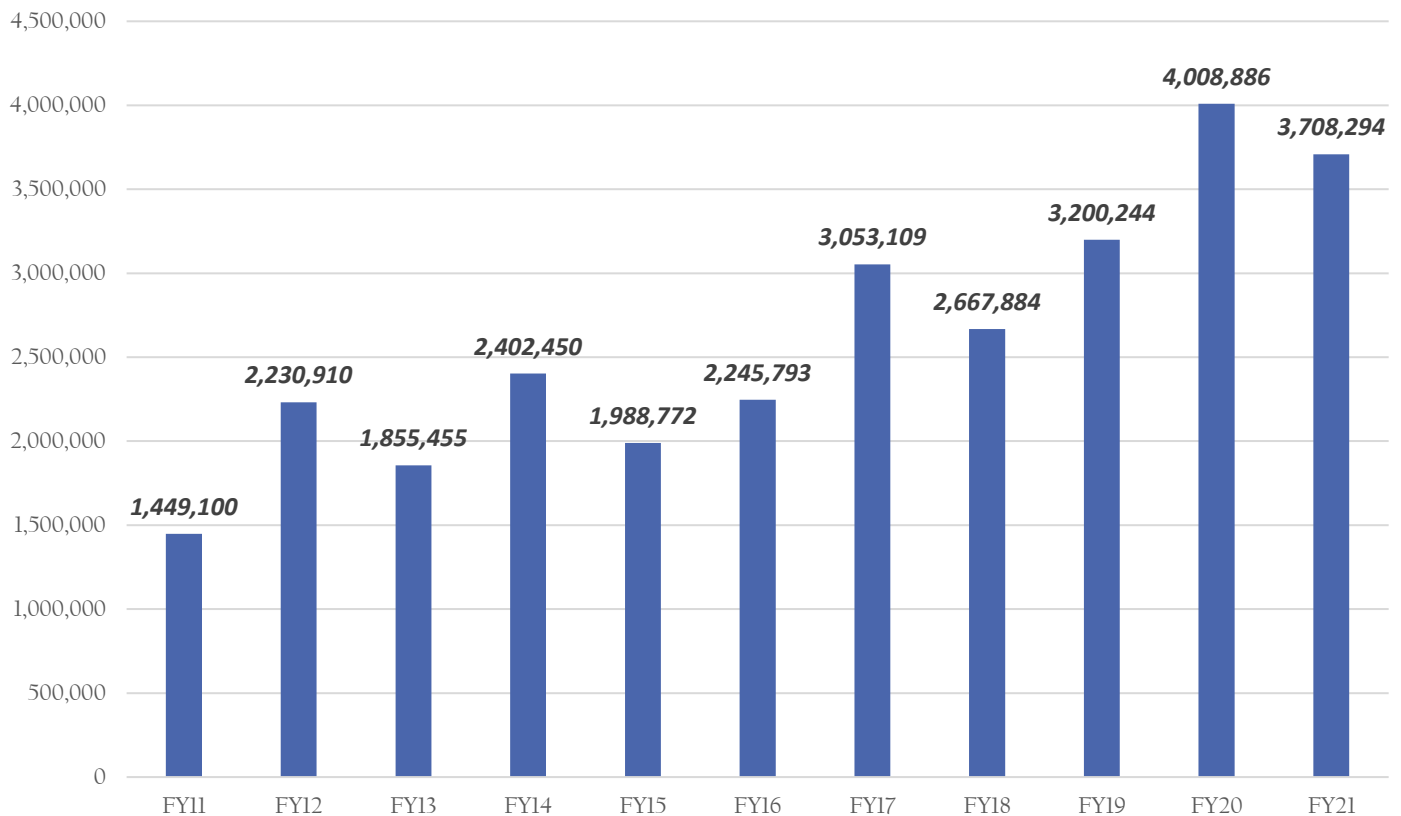
## PLAN REVIEWS BY COUNTY *1976 TOTAL*



## FY 21 PLAN REVIEW USER FEE *By County*



## FY11 TO FY21 ANNUAL PLAN REVIEW USER FEES (PRUF)

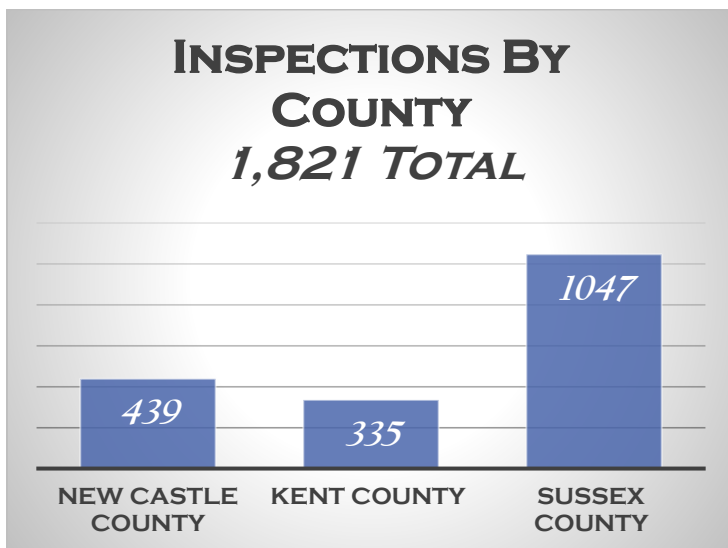




# INSPECTIONS

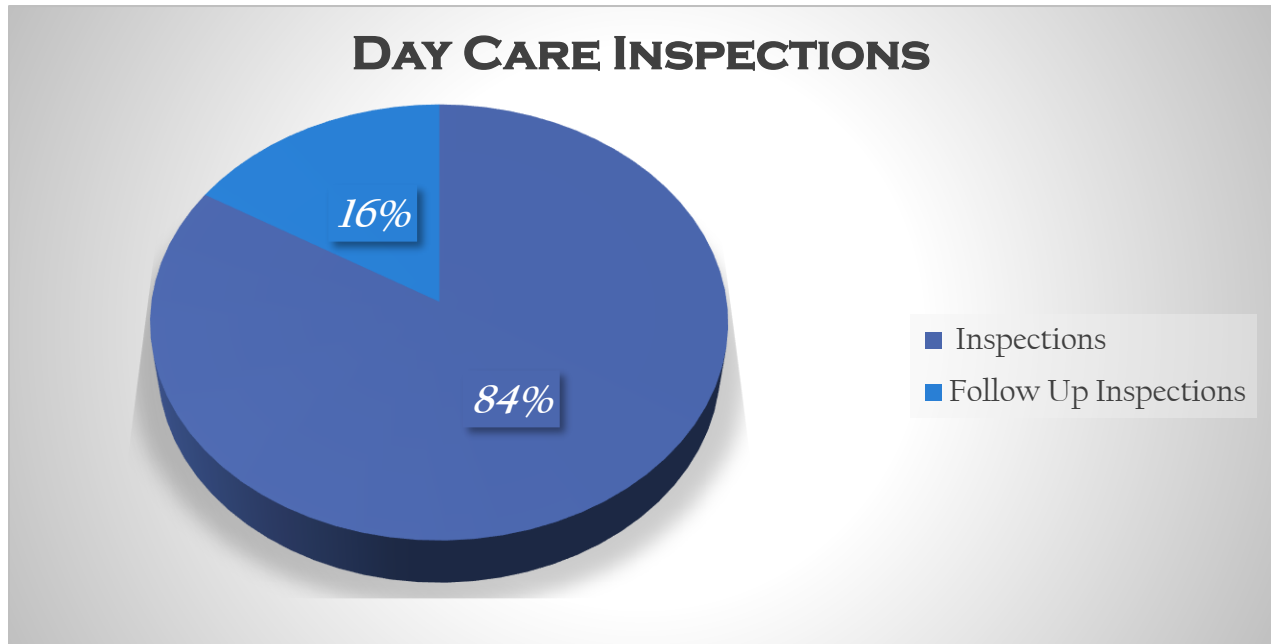
Technical Services Division staff conduct inspections to verify compliance with the Delaware State Fire Prevention Regulations for various project types and occupancies statewide. Examples of some of these inspections include:

- **Site Inspections**: Technical Services staff inspect sites to ensure that all required access for fire, emergency medical services, and law enforcement personnel complies with the site plan reviewed and approved by staff. All fire lanes, fire department connections, and fire hydrants are inspected to verify that they are installed and properly marked in compliance with the Delaware Fire Prevention Regulations.
- **Construction Inspections**: Technical Services staff inspect new buildings, additions, renovations, tenant fit-outs, and occupancy changes to ensure that what is approved on the plan submitted is what was constructed. Depending on the size of the project, several inspections may be performed, including rough-in or close-in inspections, which are done while the building's "skeleton" is still exposed, and final inspections, which verify that the project complies with the Delaware State Fire Prevention Regulations and permits the owner to pursue a Certificate of Occupancy from the local building code official once Technical Services staff leave their approval sticker on-site.
- **Fire Protection System Inspections**: Technical Services staff conduct final acceptance testing in accordance with nationally recognized codes and standards that are adopted by the Delaware State Fire Prevention Regulations for all fire sprinkler systems, fire alarm systems, hood and hood fire suppression systems, standpipe systems, clean agent systems, fixed fire suppression systems, and fire pump installations that have been submitted and approved for installation. Depending on the size and complexity of the system, several of these tests may be required. Construction projects will not receive a final inspection approval sticker unless all fire protection systems pass their acceptance testing.
- **Tank Reviews Inspections**: Technical Services staff inspect above ground, underground, and mounded tanks installed for the storage of flammable and combustible liquids and any dispensing devices for these tanks. Tanks storing bulk hazardous materials such as propane and hydrogen are also inspected. Tanks are not permitted to be placed in service until they pass their inspection.



## ***DAY CARE INSPECTIONS***

Our Day Care Inspector performs annual inspections on all Group Daycare Homes, Day Care Centers, and other facilities utilized for the supervision of children. These inspections are conducted to determine compliance with the Delaware State Fire Prevention Regulations, and once approved, the Day Care Inspector provides the approval paperwork to the Office of Child Care Licensing to meet obligation to approve “providers” to operate Day Cares in accordance with the guidelines of DELACARE requirements.



## ***HEALTH CARE INSPECTIONS***

Our Health Care Inspector performs annual inspections and surveys for health care occupancies (including hospitals, nursing homes, and limited care facilities) to verify compliance with the Delaware State Fire Prevention Regulations. The Health Care Inspector coordinates with the Department of Health and Social Services in support of their mission to improve the quality of life for Delaware’s citizens by protecting vulnerable populations from fire and life safety hazards. These inspections are also a requirement for any health care facility to receive funds from the federal Center for Medicare and Medicaid Services (CMS). Additionally, ambulatory surgery centers are inspected for compliance with the Delaware State Fire Prevention Regulations for the facility to receive an annual license from the Department of Health and Social Services’ Office of Health Care Facilities Licensing and Certifications.



## **ADDITIONAL TASKS**

Because of their special technical knowledge and expertise, supervisory staff in the Technical Services Division provided advisory assistance to several organizations.

<b>DNREC's Tank Management Section</b>	Represent the Agency on their Advisory Committee.
<b>Office of Child Care Licensing</b>	Provides technical consultation and advice as needed.
<b>City of Wilmington Fire Marshal's Office</b>	Assist with plan reviews; continued availability in an advisory role as needed.
<b>City of Newark Fire Marshal's Office</b>	Assist with plan reviews and inspections; continued availability in an advisory role as needed.
<b>National Fire Protection Association</b>	Agency provides 2 principal Members and 3 Alternate Members to various NFPA Technical Committees.
<b>County &amp; Municipal Technical Advisory Committees</b>	Participates in the advisory process in New Castle, Kent, and Sussex Counties, and several Cities and Towns.
<b>Lower Delaware &amp; Maryland Building Code Officials Association</b>	Represents the Agency; attends regularly scheduled meetings to discuss code enforcement issues in Kent County and Sussex County.
<b>Delaware Building Officials Association</b>	Represents the Agency; attends regularly scheduled meetings to discuss local code enforcement issues in New Castle County.
<b>Delaware Residential Fire Sprinkler Coalition</b>	Staff members attend and participate in scheduled meetings. Participates in a "live-burn" demonstration as needed.
<b>University of Delaware Department of Environmental Health and Safety</b>	Assist in the fire safety training of the University's Resident Assistants.
<b>Preliminary Land Use Service (PLUS) Office of State Planning Coordination</b>	The Office of the State Fire Marshal continues its support of the PLUS program administered through the Office of State Planning Coordination (OSPC). In FY-21, a representative of the State Fire Marshal has attended and participated in the monthly meetings remotely along with developers of proposed projects and representative of other State agencies.

# FISCAL YEAR 2021

## A Snapshot of Projects



Amazon Blue Diamond  
Amazon Project Madison  
Amazon Project Sophia  
Bayhealth (Multiple Projects)  
Beacon Middle School  
Beebe Surgical  
Brick Mill Early Childhood Ctr  
Cape High School  
Christiana Fire Co. Station 12  
Citizens Hose Company  
Code Purple Abundate  
Concord Plaza  
Delaware Army National Guard  
Delaware Logistics Park  
DTCC Automotive  
Darley Green  
Fur Babies Dog Day Care  
Georgetown Cheer Kitchen  
Gumboro Vol. Fire Co. Station 79

Hockers Car Wash  
Incyte  
Kings Apartments  
Mariner Middle School  
Microtel Milford  
Milford Wellness  
Milton Elementary School  
Milton Fire Department Station 85  
Morris Early Childhood Center  
Mountaire Poultry  
Apartment Complexes Statewide  
DelDOT Projects Statewide  
Storage Facilities Statewide  
New Castle County Hope Center  
Seaford High School  
Spring Lake Elementary School  
Sussex Consortium  
Sussex Montessori  
Wyoming Town Hall

## FISCAL YEAR 2021

### Projects Exceeding Two Million Dollars



ACTS Country House Additions

Amazon Blue Diamond

Amazon Project Brynn

Amazon Project Sophia and Madison

Bayhealth Southern Medical Campus

Breakthru Beverage Warehouse

Camp Arrowhead Dining Hall

ChristianaCare Logistics Center

Delaware Logistics Park Warehouse

Delaware Museum of Natural History

Exelon New Castle Regional Training  
Office

FMC Stine Research Center

Harmony at Glasgow Senior Living  
Facility

Lodge at Historic Lewes, Lewes

Lidl Store

Marlette Funding

Merck Animal Health Building 3

Microtel Inn and Suites

Middletown High School

Mt. Cuba Center Expansion

N.K.S. Distributors

Nicola's Pizza

Post Acute Medical

Redner's Warehouse Market

Residence at Rehoboth Bay

Riverplace Apartments

Safstor DuPont Highway

Spring Hill Suites by Marriott

Town of Millsboro Water Treatment  
Plant

Wegmans Store

In addition to above, multiple educational projects were submitted for public and private schools statewide.

# DELAWARE STATE FIRE PREVENTION REGULATIONS

*The State Fire Prevention Commission has recently adopted a new edition of the Delaware State Fire Prevention Regulations, which become effective on September 1, 2021.*

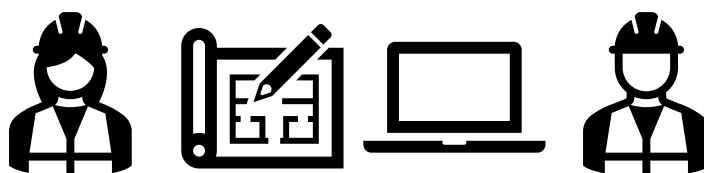
Some of the highlights of these changes include:

- Adoption of four new NFPA Codes and Standards:
  - NFPA 92, *Smoke Control Systems*, 2018 edition.
  - NFPA 400, *Hazardous Material Code*, 2019 edition.
  - NFPA 855, *Installation of Stationary Energy Storage Systems*, 2020 edition.
  - NFPA 914, *Code for Fire Protection of Historic Structures*, 2019 edition.
- Regulation 701, Chapter 1, Section 3.1.4, Qualified Historic Buildings has been modified so that a qualified historic building shall meet the requirements for building rehabilitation per the Delaware State Fire Prevention Regulations and appropriate NFPA codes and standards.
- Fire hydrant spacing required by Regulation 702, Chapter 6, Fire Flow Table 2, has been changed from 1,000' to 800' on center spacing for one- and two-family detached dwellings.
- Regulation 705, Chapter 5, Section 3.5.2 permits parking between a one-story building and the perimeter access area to be reduced from 15 feet to 10 feet.

All projects submitted to the Technical Services Division on or after September 1, 2021 will be required to comply with the new edition of the Delaware State Fire Prevention Regulations.

The current edition of the Delaware State Fire Prevention Regulations can be found here:

<https://statefiremarshal.delaware.gov/regulations-appeals-alternatives/>





## TECHNICAL SERVICES

### *Quality Assurance Program & Licensing*

The Delaware State Fire Prevention Regulations requires that all companies that design, install, and maintain fire protection systems be licensed annually by the Office of the State Fire Marshal.

In Fiscal Year 2021, there were 312 Licenses issued to companies providing services to owners of Fire Alarm Signaling systems and/or Fire Suppression Systems. Employed by those companies are 720 Certificate Holders which the Office of the State Fire Marshal recognizes as the licensed company's party of responsible charge.

Additionally, there are 123 persons employed by the licensed Fire Suppression companies that possess the Certificate necessary to conduct the inspection and testing of water-based fire protection systems.

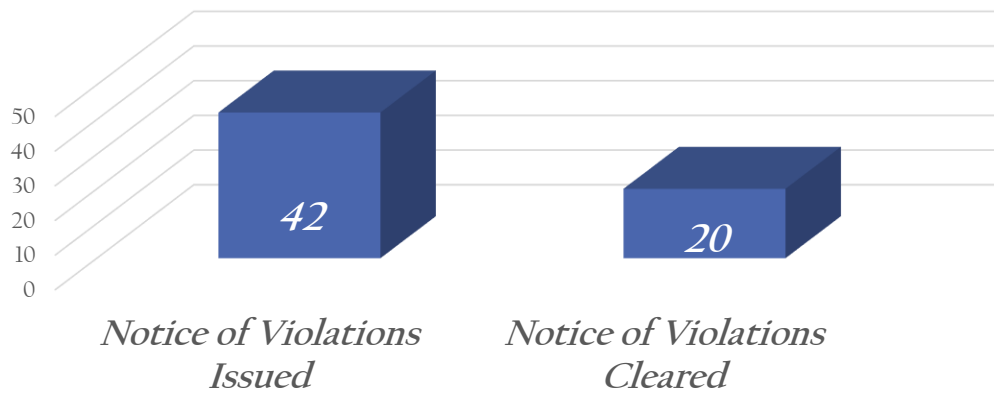
The Office of the State Fire Marshal's dedicated Administrative Staff handles the processing of all licensing paperwork, fees, Certificates of Inspection, and Major Deficiency Reports in addition to fielding inquiries from licensed contractors and those wishing to obtain a license to design, install, and maintain fire protection systems.

Major Deficiency Reports are sent to the Divisional Office in the County in which the deficiency originated for investigation by Technical Services Division Staff or Deputy Fire Marshals to verify a fire protection system does indeed have a deficiency and corrective action is explained to the owner or the owner's representative.

If the corrective action can be performed while staff is on site, this will be noted in the file and the deficiency will be cleared. If corrective action cannot be performed while staff is on site, then a Notice of Violation (NOV) is written with the deficiency noted and what corrective action must be taken to address the deficiency. If the deficiency is to such a degree that it will take time and funding to address, then a Plan of Corrective Action is provided to the Office of the State Fire Marshal for review and approval.

There are currently over 16,600 fire protection systems in service across the State of Delaware, including fire alarm signaling systems, fire suppression systems, standpipe systems, fire pumps, special hazard systems, and commercial cooking hood suppression systems.

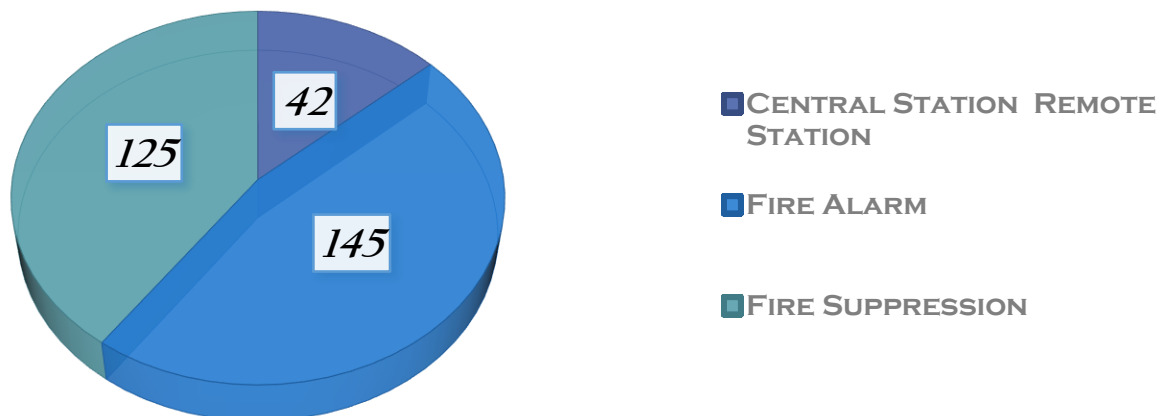
## QUALITY ASSURANCE INSPECTIONS STATEWIDE



## CERTIFICATE HOLDERS Total 720



## LICENSES HELD TOTAL 312





# **RESIDENTIAL FIRE SPRINKLER SYSTEMS**

In 1973, the National Commission on Fire Prevention and Control issued the seminal report *America Burning*. One of the recommendations tasked the United States Fire Administration to ‘support the development of the necessary technology for improved automatic extinguishing systems that would find ready acceptance by Americans in all kinds of dwelling units.’ The Commission believed this recommendation would significantly reduce the number and severity of civilian and firefighter injuries and deaths throughout the United States.

[www.usfa.fema.gov/downloads/pdf/publications/fa-264.pdf](http://www.usfa.fema.gov/downloads/pdf/publications/fa-264.pdf)

Fast forward to 2004 at the Firefighter Life Safety Summit, where 16 Life Safety Initiatives were developed to protect the lives of firefighters. The National Fallen Firefighters Foundation was tasked with promulgating these initiatives throughout the fire service and developing material to support the implementation of these initiatives. [www.everyonegoeshome.com/16-initiatives/](http://www.everyonegoeshome.com/16-initiatives/)

Initiative #15, Code Enforcement & Sprinklers, asks the fire service to advocate for stronger codes and standards, which will ultimately decrease the number of residential fires, thus reducing the chances of fireground injuries or death to the firefighters. Daily, Technical Services Staff review and inspect projects for compliance with the Delaware State Fire Prevention Regulations in support of Initiative #15.

The Office of the State Fire Marshal encourages all developers and builders to install residential fire sprinkler systems in all one- and two-family dwellings and townhomes, and our agency will work with local planning and building code officials to assist them with the implementation of these effective life safety systems.

For the timeline of July 1, 2020 to June 30, 2021, the following NFPA 13D-compliant residential fire sprinkler systems were reviewed and inspected by Technical Services Division Staff:

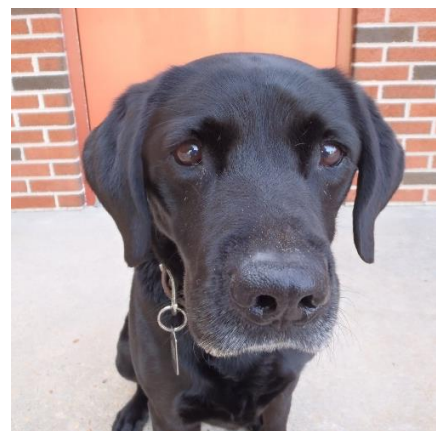
*New Castle County: 58*

*Sussex County: 48*



## ACCELERANT DETECTION CANINE UNIT

*CDFM John Galaska  
& K9 Tanya*



The Office of the State Fire Marshal Accelerant Detection K9 Team has served the state since 1990. The K9 Unit examines fire scenes throughout the state for the presence of accelerants or ignitable liquids, such as gasoline or lighter fluid that may be used to start or spread a fire. In 1997 the agency received a grant from State Farm Insurance Company for an Accelerant Detection K9. This same grant was received and utilized for the current K9. The grant provides the K9 and initial training, lodging and expenses for certification.

The Accelerant Detection K9 Unit has been staffed since 2014 by K9 Tanya, a Black Labrador Retriever and handler Chief Deputy Fire Marshal John M. Galaska. Chief Deputy Galaska has been a handler in the K9 program since 2009, first working with the late K9 Sparks as a secondary handler under Deputy State Fire Marshal Brian Schad and then being partnered with current K9 Tanya as primary handler. The Team of Tanya and handler Chief Deputy Galaska are required to recertify each year. In September 2020 the team successfully recertified. This past fiscal year marks Tanya's 7<sup>th</sup> year of dedicated service to the citizens of the State of Delaware. This encompasses K9 response to 503 fire scenes and operational service 238 times. Tanya stands at the ready to serve 24 hours a day, 7 days a week.

K9 Tanya is a food reward K9 which refers to the way she is trained. Tanya is required to make a positive alert coming to her final response on an accelerant to be rewarded with a handful of food. To keep up with food intake K9 Tanya and Chief Deputy Galaska follow a very intensive daily training processes delivered at different times and for random durations involving actual fire scenes, training scenarios and training aids. This process is repeated until K9 Tanya receives her daily allotment of food which varies from day to day and is regulated by her handler. Tanya is a "companion dog" who lives and travels with Chief Deputy Galaska. A strong team bond is formed between handler and K9 through the intensive training regimen, however, Tanya is a faithful friend and companion to all at the State Fire Marshal's Office.

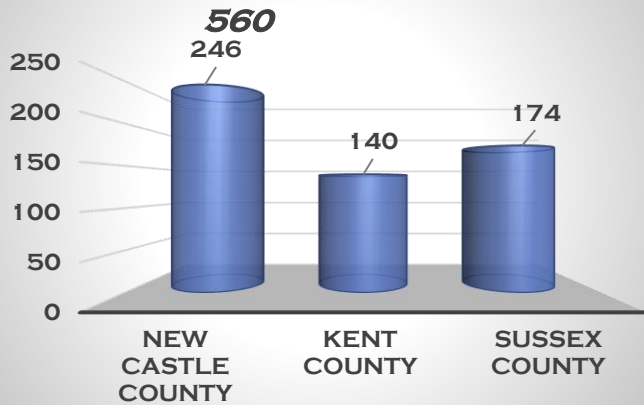
This past year K9 Tanya and Chief Deputy Galaska trained 933 separate times. This training represents thousands of trips for K9 Tanya to Galaska's hand for food after a positive final response alert. K9 Tanya responded to 75 fire scenes this fiscal year and was utilized in her operational capacity 30 times. These operational K9 examinations included major loss fire scenes, personal injury fire scenes as well as fatal fire scenes. Successful demonstrations were performed for Boy Scouts of America, Delaware State Police Academy, New Castle County Police Academy, Sussex County Fire Chiefs meeting and Sussex County CHEER Centers.

The COVID-19 pandemic continued to suspend many public educational responses. K9 Tanya and Chief Deputy Galaska can provide regional assistance to other agencies when needed and this fiscal year assistance was given to the Wilmington Fire Department as well as on call standby for the Maryland State Fire Marshal's Office. K9 Tanya and handler Deputy Galaska were featured on a 2014 web series presented by celebrity K9 trainer Victoria Stilwell. This web series is available for viewing at [www.arsondog.org](http://www.arsondog.org)

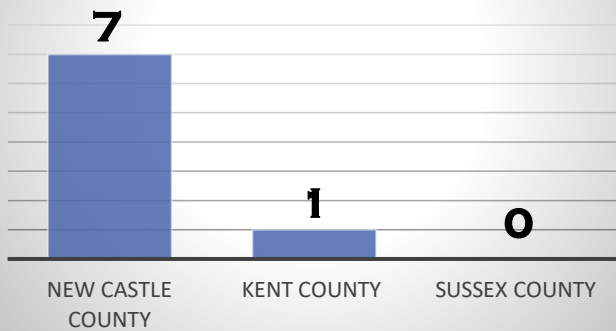


# INVESTIGATIONS

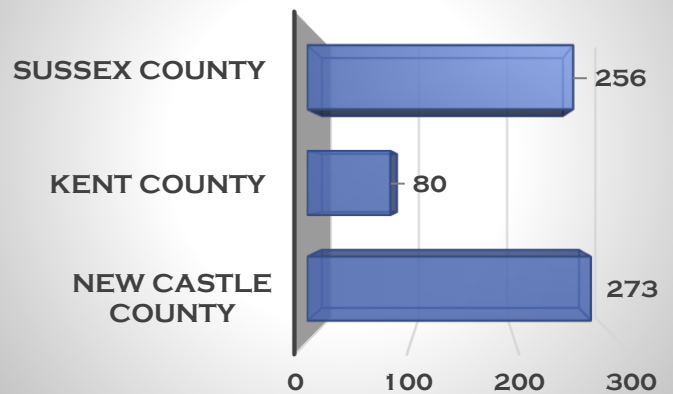
**FIRE INVESTIGATIONS  
STATEWIDE**



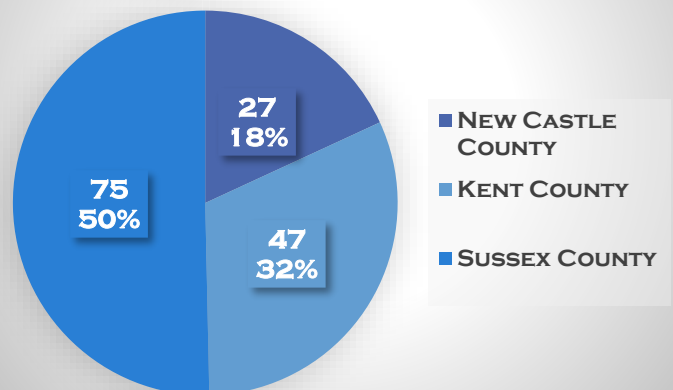
**FIRE DEATHS  
STATEWIDE**



**INSPECTIONS STATEWIDE**



**FIRE CODE COMPLAINTS  
STATEWIDE**



# MAJOR INCIDENT RESPONSE TEAM

*July 1, 2020 - June 30, 2021*

**TOTAL FIRE DEATHS: 8**

**TOTAL FATALITIES WITH WORKING SMOKE DETECTORS: 3**

**TOTAL FATALITIES WITHOUT SMOKE DETECTORS: 5**

**TOTAL FATALITIES WITH FIRE SUPPRESSION SYSTEM: 0**

**TOTAL FATALITIES WITHOUT FIRE SUPPRESSION SYSTEM: 8**

Date of Fire: Tuesday, October 27, 2020  
Time of Alarm: 1753 Hours  
Victim: W/F 70 years old  
Location: **N. Maryland Ave - Wilmington**  
Fire Department: Five Points Fire Co.  
Type of Incident: Apartment Building Fire  
Origin: Pending Determination  
Cause: Pending Determination  
Cause of Death: Pending Autopsy  
Smoke Detectors: No  
Fire Suppression System: No

Date of Fire: Thursday, January 14, 2021  
Time of Alarm: 1135 Hours  
Victim: B/F 92 years old  
Location: **Rice Drive - Bear**  
Fire Department: Christiana Fire Co.  
Type of Incident: House Fire  
Origin: Living Room  
Cause: Pellet Stove  
Cause of Death: Thermal Burns  
Smoke Detectors: Yes  
Fire Suppression System: No

Date of Fire: Wednesday, November 25, 2020  
Time of Alarm: 0952 Hours  
Victim: B/F 58 years old  
Location: **Springer Street - Wilmington**  
Fire Department: Wilmington Fire Department  
Type of Incident: Apartment Building Fire  
Origin: Pending Determination  
Cause: Pending Determination  
Cause of Death: Pending Determination  
Smoke Detectors: Yes  
Fire Suppression System: No

Date of Fire: Monday, March 15, 2021  
Time of Alarm: 1133 Hours  
Victim: B/F 27 years old  
Location: **W. 24<sup>th</sup> Street - Wilmington**  
Fire Department: Wilmington Fire Department  
Type of Incident: House Fire  
Origin: Pending Determination  
Cause: Pending Determination  
Cause of Death: Pending Determination  
Smoke Detectors: No  
Fire Suppression System: No

Date of Fire: Friday, November 27, 2020  
Time of Alarm: 0635 Hours  
Victim: B/M 43 years old  
Location: **Kirkwood St. Georges Road - Bear**  
Fire Department: Delaware City Fire Co.  
Type of Incident: Apartment Building Fire  
Origin: Kitchen  
Cause: Cooking Materials on Stovetop  
Cause of Death: Smoke Inhalation & Acute Ethanol Intoxication  
Smoke Detectors: No  
Fire Suppression System: No

Date of Fire: Sunday, May 2, 2021  
Time of Alarm: 1617 Hours  
Victim: W/M 61 years old  
Location: **Tenth Street - Dover**  
Fire Department: Little Creek Volunteer Fire Co.  
Type of Incident: House Trailer Fire  
Origin: Pending Determination  
Cause: Pending Determination  
Cause of Death: Pending Determination  
Smoke Detectors: No  
Fire Suppression System: No

Date of Fire: Thursday, December 31, 2020  
Time of Alarm: 0922 Hours  
Victim: W/M 93 years old  
Location: **Carr Road - Wilmington**  
Fire Department: Brandywine Hundred Fire Co.  
Type of Incident: House Fire  
Origin: Pending Determination  
Cause: Pending Determination  
Cause of Death: Smoke Inhalation  
Smoke Detectors: No  
Fire Suppression System: No

Incident Number: 90-21-02-0312  
Date of Fire: Monday, May 17, 2021  
Time of Alarm: 1940 Hours  
Victim: B/M 65 years old  
Location: **E. Reamer Avenue - Wilmington**  
Fire Department: Five Points Fire Co.  
Type of Incident: Apartment Building Fire  
Origin: Living Room  
Cause: Discarded Smoking Material  
Cause of Death: Thermal Burns & Smoke Inhalation  
Smoke Detectors: Yes  
Fire Suppression System: No

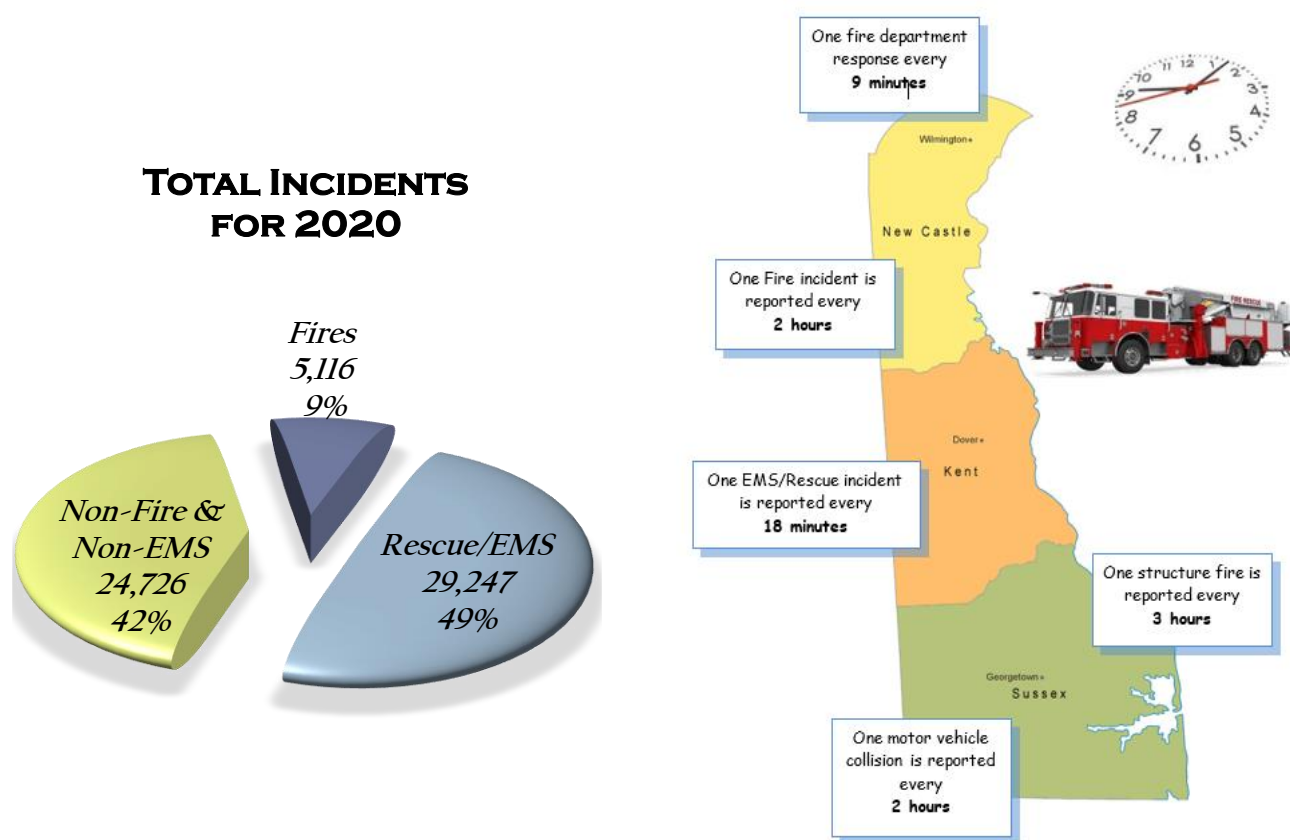
# DELAWARE FIRE INCIDENT REPORTING SYSTEM (DFIRS)

## *Keeping Delaware Safe – Fighting Fire with Facts*

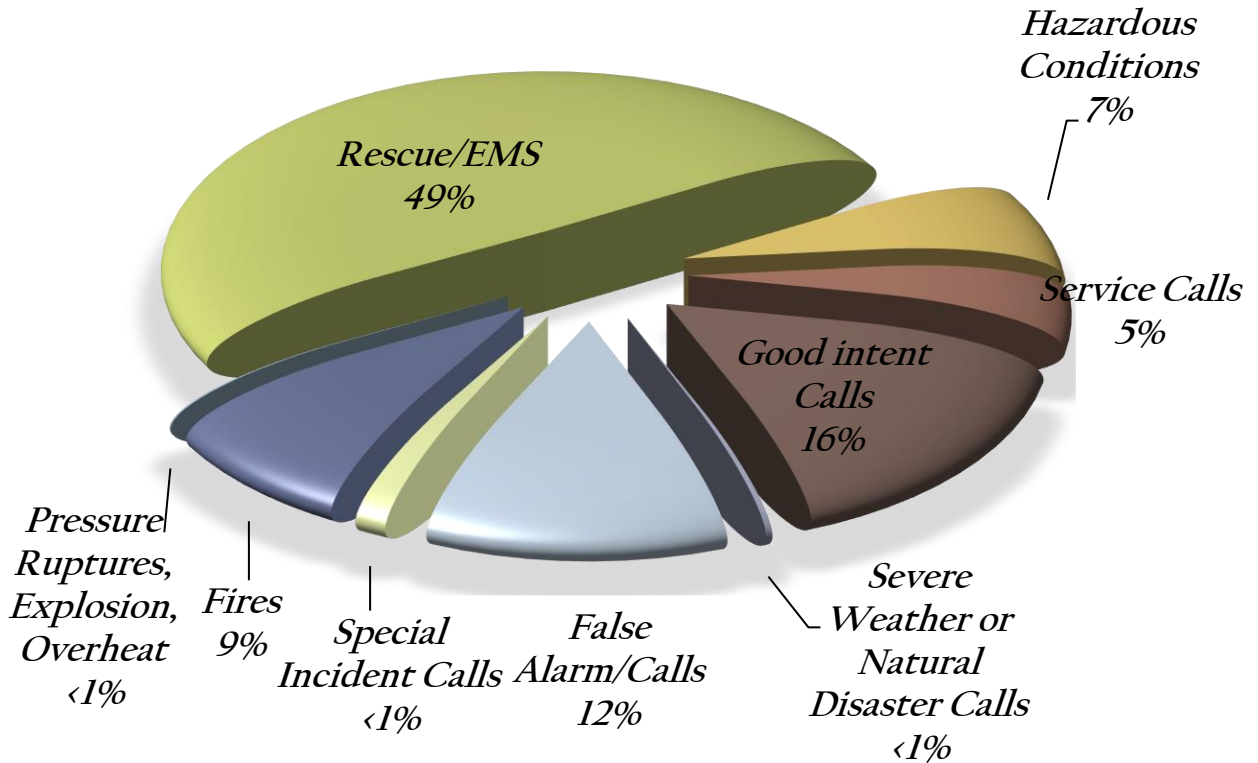
DFIRS is Delaware's segment of the Federal Emergency Management Agency's (FEMA) National Fire Incident Reporting System (NFIRS), a reporting system that captures the full range of incident activity. It constitutes the world's largest national collection of fire incident information. The Office of the State Fire Marshal oversees the consolidation and technical review of the collected data from all 61 Delaware fire departments.

In 2020 **59,089** incidents were reported to the Office of the State Fire Marshal. There were **9,126** incidents in which a fire department provided assistance (mutual or automatic aid given) to another jurisdiction.

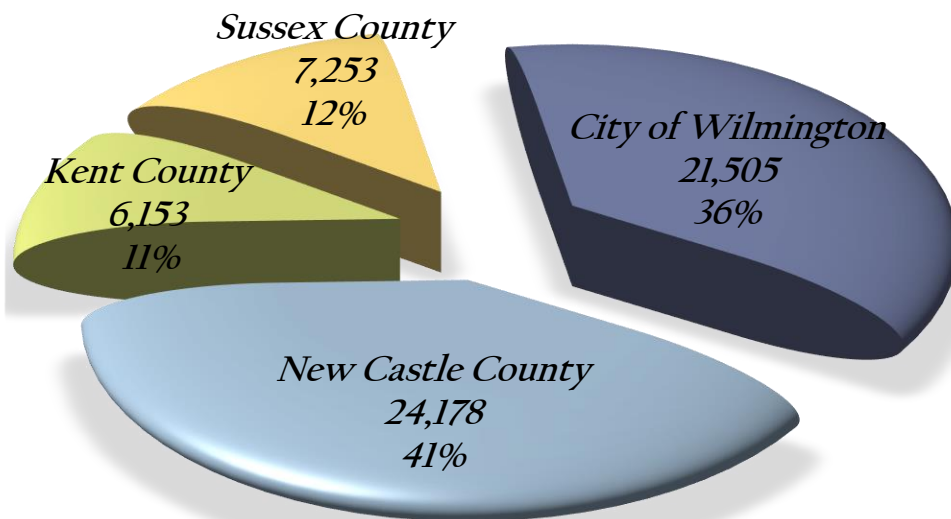
The makeup of the types of incidents that fire departments reported in 2020 showed a **decrease by 4 percent** from the previous year. The following charts provide an overview of the current characteristics in Delaware:



## INCIDENT TYPE SUMMARY FOR 2020

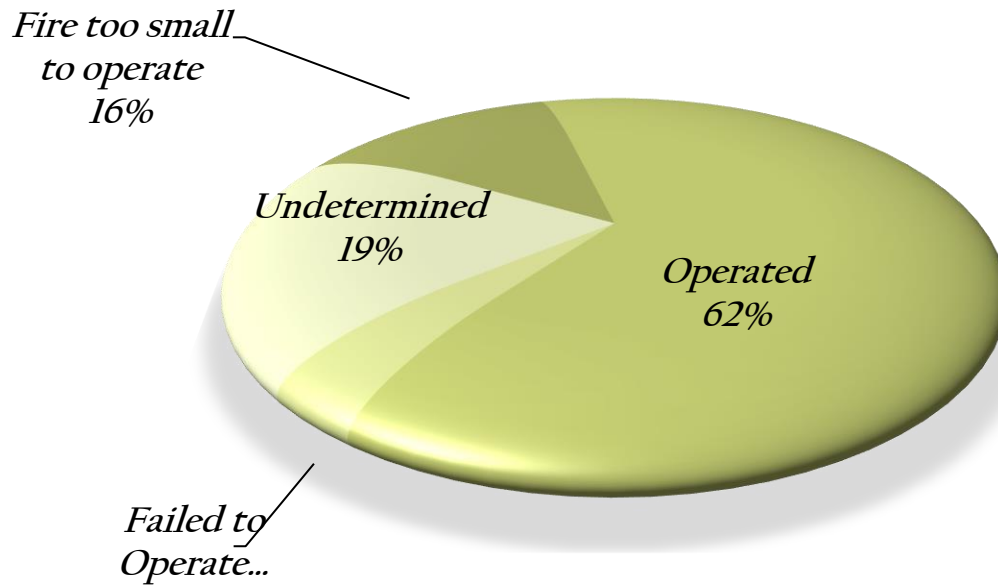


## INCIDENTS BY COUNTY AND CITY OF WILMINGTON FOR 2020

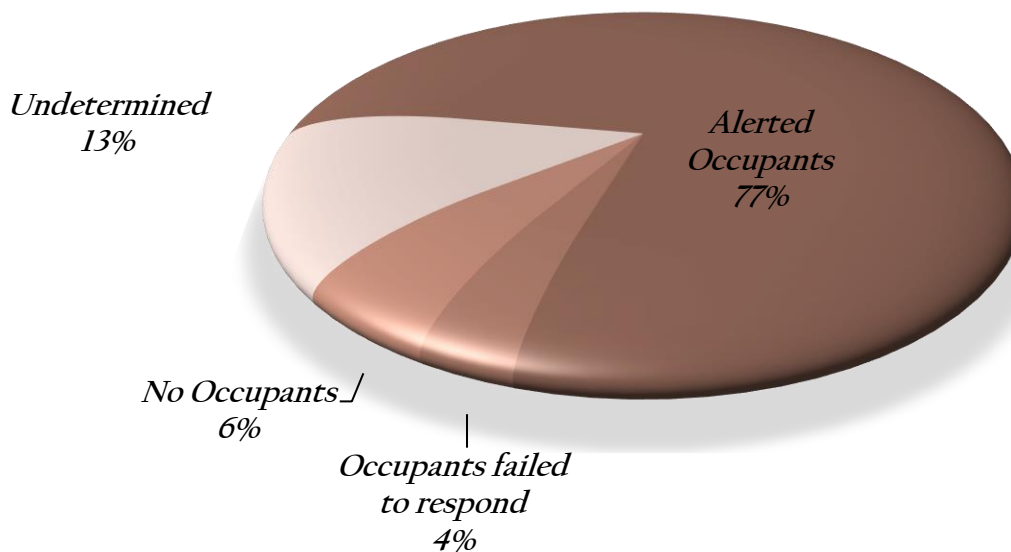


The data in these tables identify the operating principle of detectors present in the area of origin or in near proximity to the area of origin.

### DETECTOR OPERATION FOR 2020

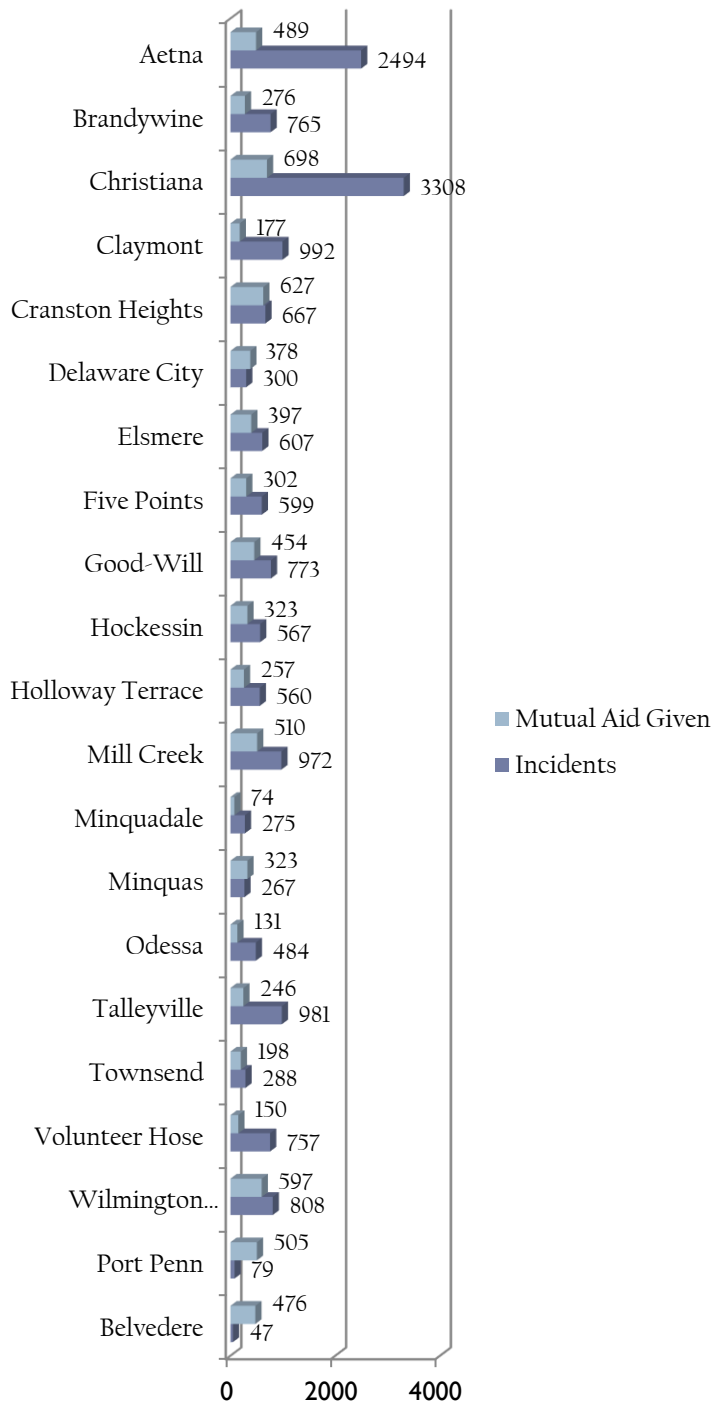


### DETECTOR EFFECTIVENESS FOR 2020

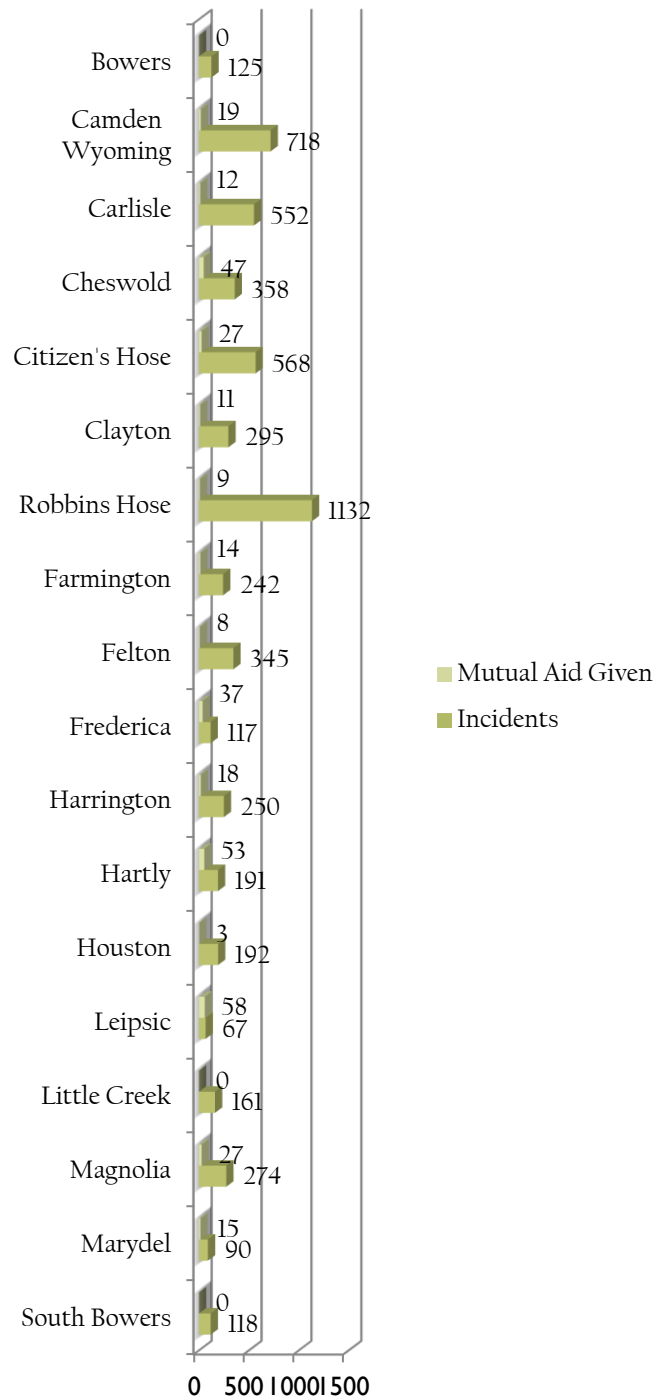




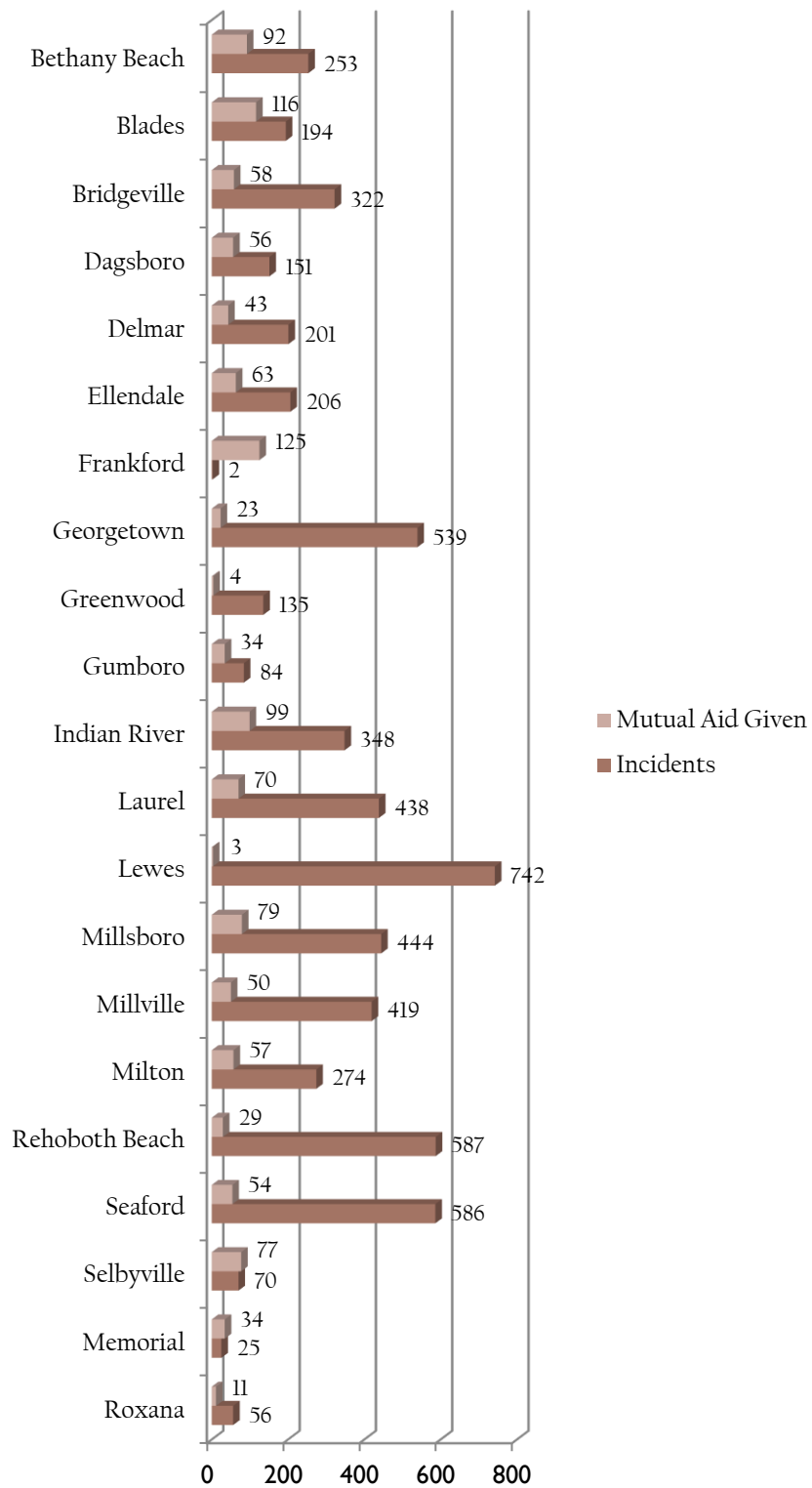
# **NEW CASTLE COUNTY INCIDENTS (EXCLUDING CITY OF WILMINGTON) FOR 2020**



# **KENT COUNTY INCIDENTS FOR 2020**



## SUSSEX COUNTY INCIDENTS FOR 2020



# ***OFFICE OF THE*** ***Delaware State Fire Marshal***



## **HEADQUARTERS DIVISION**

1537 Chestnut Grove Road  
Dover, DE 19904

## **NEW CASTLE DIVISION**

2307 MacArthur Road  
New Castle, DE 19720



## **SUSSEX DIVISION**

22705 Park Avenue  
Georgetown, DE 19947

